

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P730434

Luminaire Tested: **HBLED-LD5-15HE-W-UNV-L840**

Issue Date: 11/13/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P730434  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-003-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/13/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-15HE-W-UNV-L840  
Description: 15000 LUMEN, HE HBLED WITH WIDE DISTRIBUTION  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15940.0 lumens  
Efficiency: N/A  
Efficacy: 174.8 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.31 / 1.43  
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')  
CIE Type: Direct

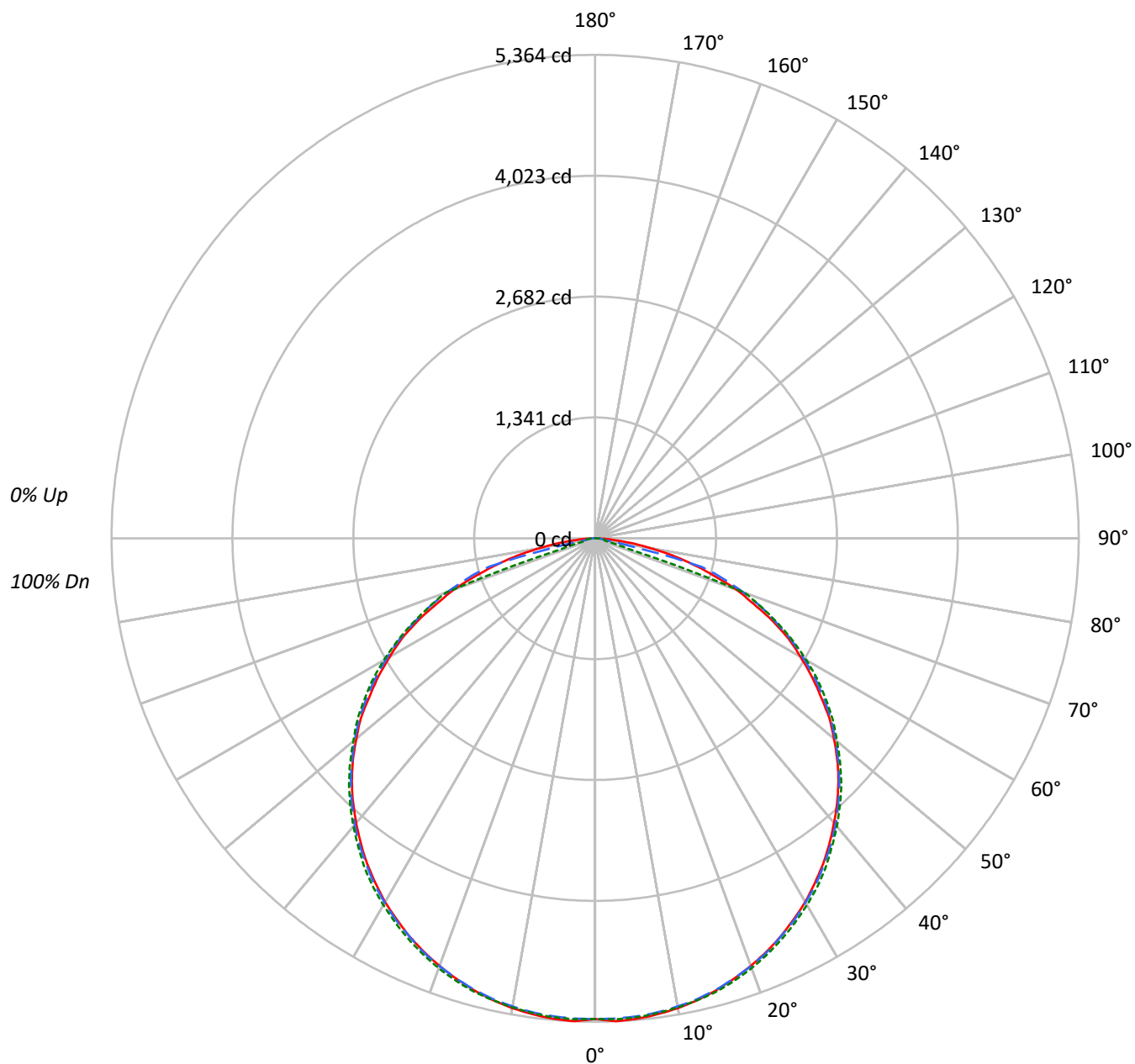
Input Watts (W): 91.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |     | 30  |     |     |     | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 |
| 1   | 109 | 105 | 100 | 97  | 106 | 102 | 98  | 95  | 98  | 95  | 92  | 94  | 92  | 89  | 91  | 88  | 87  |
| 2   | 99  | 91  | 84  | 79  | 97  | 89  | 83  | 78  | 86  | 80  | 76  | 82  | 78  | 74  | 79  | 76  | 72  |
| 3   | 90  | 80  | 72  | 65  | 88  | 78  | 71  | 64  | 75  | 69  | 63  | 72  | 67  | 62  | 70  | 65  | 61  |
| 4   | 82  | 70  | 62  | 55  | 80  | 69  | 61  | 54  | 67  | 59  | 54  | 64  | 58  | 53  | 62  | 57  | 52  |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 59  | 52  | 46  | 57  | 51  | 46  | 56  | 50  | 45  |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 54  | 46  | 40  | 52  | 45  | 40  | 50  | 44  | 40  |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 40  | 35  | 46  | 40  | 35  |
| 8   | 60  | 46  | 38  | 32  | 58  | 46  | 38  | 32  | 44  | 37  | 32  | 43  | 36  | 31  | 42  | 36  | 31  |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 33  | 28  |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 36  | 30  | 25  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8612 | 8612 | 8612 |
| 5°  | 8674 | 8630 | 8645 |
| 10° | 8679 | 8648 | 8665 |
| 15° | 8678 | 8666 | 8705 |
| 20° | 8677 | 8679 | 8724 |
| 25° | 8681 | 8685 | 8738 |
| 30° | 8691 | 8702 | 8759 |
| 35° | 8689 | 8717 | 8790 |
| 40° | 8690 | 8745 | 8793 |
| 45° | 8715 | 8747 | 8818 |
| 50° | 8688 | 8739 | 8796 |
| 55° | 8593 | 8713 | 8807 |
| 60° | 8495 | 8633 | 8741 |
| 65° | 8308 | 8480 | 8544 |
| 70° | 7887 | 8224 | 8324 |
| 75° | 7034 | 7628 | 919  |
| 80° | 5657 | 950  | 1005 |
| 85° | 3764 | 1232 | 1254 |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 506.6   | 3.2       |
| 10°-20°   | 1463.9  | 9.2       |
| 20°-30°   | 2249.1  | 14.1      |
| 30°-40°   | 2768.7  | 17.4      |
| 40°-50°   | 2951.8  | 18.5      |
| 50°-60°   | 2759.3  | 17.3      |
| 60°-70°   | 2184.3  | 13.7      |
| 70°-80°   | 929.4   | 5.8       |
| 80°-90°   | 126.9   | 0.8       |
| 90°-100°  | 0.0     | 0.0       |
| 100°-110° | 0.0     | 0.0       |
| 110°-120° | 0.0     | 0.0       |
| 120°-130° | 0.0     | 0.0       |
| 130°-140° | 0.0     | 0.0       |
| 140°-150° | 0.0     | 0.0       |
| 150°-160° | 0.0     | 0.0       |
| 160°-170° | 0.0     | 0.0       |
| 170°-180° | 0.0     | 0.0       |
| 0°-30°    | 4219.6  | 26.5      |
| 0°-40°    | 6988.3  | 43.8      |
| 0°-60°    | 12699.4 | 79.7      |
| 0°-90°    | 15940.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 15940.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 5334 | 5334  | 5334 | 5334  | 5334 |      |
| 5°  | 5352 | 5328  | 5324 | 5303  | 5334 | 509  |
| 15° | 5191 | 5182  | 5184 | 5170  | 5208 | 1466 |
| 25° | 4873 | 4867  | 4875 | 4873  | 4905 | 2247 |
| 35° | 4408 | 4401  | 4423 | 4438  | 4459 | 2758 |
| 45° | 3817 | 3795  | 3831 | 3846  | 3862 | 2941 |
| 55° | 3053 | 3062  | 3095 | 3106  | 3129 | 2733 |
| 65° | 2174 | 2194  | 2220 | 2236  | 2236 | 2139 |
| 75° | 1128 | 1176  | 1223 | 200   | 147  | 1193 |
| 85° | 203  | 61    | 66   | 69    | 68   | 265  |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 5334.0 | 5334.0 | 5334.0 | 5334.0 | 5334.0 |
| 2.5°  | 5363.7 | 5338.7 | 5334.0 | 5312.6 | 5341.1 |
| 5°    | 5351.8 | 5328.0 | 5324.5 | 5303.1 | 5334.0 |
| 7.5°  | 5326.9 | 5307.8 | 5305.5 | 5282.9 | 5313.8 |
| 10°   | 5293.6 | 5275.8 | 5274.6 | 5254.4 | 5285.3 |
| 12.5° | 5248.4 | 5233.0 | 5237.7 | 5217.5 | 5248.4 |
| 15°   | 5191.4 | 5181.9 | 5184.3 | 5170.0 | 5208.0 |
| 17.5° | 5122.5 | 5117.7 | 5122.5 | 5111.8 | 5146.2 |
| 20°   | 5050.0 | 5044.1 | 5051.2 | 5045.2 | 5077.3 |
| 22.5° | 4965.6 | 4958.5 | 4972.8 | 4964.4 | 4994.1 |
| 25°   | 4872.9 | 4867.0 | 4875.3 | 4872.9 | 4905.0 |
| 27.5° | 4767.2 | 4761.3 | 4779.1 | 4780.3 | 4805.2 |
| 30°   | 4661.4 | 4653.1 | 4667.4 | 4673.3 | 4698.3 |
| 32.5° | 4535.5 | 4533.1 | 4554.5 | 4559.3 | 4585.4 |
| 35°   | 4408.3 | 4401.2 | 4422.6 | 4438.1 | 4459.4 |
| 37.5° | 4269.3 | 4268.1 | 4290.7 | 4303.8 | 4314.5 |
| 40°   | 4123.2 | 4117.2 | 4149.3 | 4162.4 | 4171.9 |
| 42.5° | 3974.6 | 3961.6 | 3992.5 | 4009.1 | 4019.8 |
| 45°   | 3816.6 | 3795.2 | 3830.9 | 3846.3 | 3861.8 |
| 47.5° | 3643.1 | 3624.1 | 3658.6 | 3675.2 | 3685.9 |
| 50°   | 3458.9 | 3441.1 | 3479.1 | 3493.4 | 3501.7 |
| 52.5° | 3273.6 | 3255.8 | 3296.2 | 3308.0 | 3328.2 |
| 55°   | 3052.6 | 3062.1 | 3095.3 | 3106.0 | 3128.6 |
| 57.5° | 2848.2 | 2856.5 | 2888.6 | 2901.7 | 2927.8 |
| 60°   | 2630.7 | 2643.8 | 2673.5 | 2686.6 | 2706.8 |
| 62.5° | 2420.4 | 2421.6 | 2457.3 | 2463.2 | 2478.7 |
| 65°   | 2174.5 | 2193.5 | 2219.6 | 2236.3 | 2236.3 |
| 67.5° | 1900.0 | 1946.3 | 1991.5 | 1987.9 | 1997.4 |
| 70°   | 1670.7 | 1688.5 | 1742.0 | 1750.3 | 1763.3 |
| 72.5° | 1383.1 | 1429.4 | 1488.9 | 1112.2 | 377.9  |
| 75°   | 1127.6 | 1176.4 | 1222.7 | 199.6  | 147.3  |
| 77.5° | 875.7  | 913.8  | 406.4  | 114.1  | 111.7  |
| 80°   | 608.4  | 669.0  | 102.2  | 104.6  | 108.1  |
| 82.5° | 400.4  | 326.8  | 84.4   | 92.7   | 93.9   |
| 85°   | 203.2  | 60.6   | 66.5   | 68.9   | 67.7   |
| 87.5° | 66.5   | 36.8   | 38.0   | 39.2   | 40.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180°    - - 45°-225°    - - - 90°-270°







(END OF REPORT)